

SARRACENIA PURPUREA IN WESTERN CANADA

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The genus *Sarracenia*, distributed mainly in the Southeastern United States, has one species extending northwards to eastern Canada and beyond (Schnell 1976). During the retreat of the last continental ice sheet, 10 to 18,000 years ago, *Sarracenia purpurea* colonized the newly formed bogs extending its range as far north as subarctic Canada and west across the boreal forest ranges to the Rocky Mountains. The northwestern limits of the species were uncertain until populations of *S. purpurea* were discovered in northeastern British Columbia (Annas 1977, Krajina 1968) and in the District of Mackenzie of the Northwest Territories (Cody 1973). The *S. purpurea* populations in British Columbia are the most western known today, occurring approximately 700 km (440 mi.) from the Pacific Ocean and within 540 km (340 mi.) of southern Alaska. These pitcher plant locations are actually further west longitudinally than Los Angeles and San Francisco. In 1973, shortly after these discoveries, an ecological reserve covering 259 hectares was created to protect one of the two known populations of *Sarracenia* in British Columbia (reserves ref. 1987). A reserve proposed for the second location has not yet been established.

The summer of 1988 held a work semester in the Yukon Territories for me where I worked as a field biologist involved with the infamous scourges of the north, mosquitos and blackflies realizing that my duties would be taking me into potential habitats of insectivorous plants. I spent the time prior to my departure obtaining maps and searching for literature on documented locations.



S. purpurea in habitat near Ft. Nelson, British Columbia, Canada. Note red tips of pitchers. Photos by author.



Closer view of *S. purpurea*.

I had the opportunity to visit the *Sarracenia* reserve during the weekend of July 9th, and even with maps of the area it proved to be difficult to find. After travelling to the end of a muddy unmarked road I proceeded on foot for approximately 2 km further through black spruce stands, dense shrubs, and sphagnum bogs. Between checking my compass, pulling myself out of soft areas in the bogs, watching for bears, and swatting at the cloud of mosquitos following me, I might have missed the pitcher plants entirely! Fortunately, their flowers were on scapes 20 to 30 cm tall making them immediately visible above the grasses. The plants were growing almost submerged in floating sphagnum mats that encircled a small lake, and occurred with *Drosera anglica* and *D. rotundifolia*. Many plants had only the upper half of their pitchers above the water table, and the younger ones barely managed to remain uncovered by the sphagnum moss. Despite growing in full sun, the plants had only light venation on their bright green pitchers with some reddening of the hood tips. Many plants had put up 2 or 3 flowers each recently and most still had their petals intact despite the overall deep red colouring of the flower parts, the styles remained green with just the tips tinged in red.

The *Sarracenia* in the ecological reserve appeared to be doing quite well judging by the number of flowering plants and the presence of seedlings. I hope to explore the second known pitcher plant location in British Columbia in the future and perhaps obtain seed to introduce to other suitable habitats.

Selected References:

- Annas, R.M. 1977. Boreal Ecosystems of the Fort Nelson Area of North Eastern British Columbia. PhD dissertation. University of British Columbia, Vancouver, British Columbia. p. 238-244.
- Cody, W.J. & Talbot, S.S. 1973. The Pitcher Plant *Sarracenia purpurea* L. in the Northwestern Part of its Range. *The Canadian Field Naturalist* 87:318-320.
- Guide to Ecological Reserves in British Columbia*. 1987. Ministry of Environment and Parks. Victoria, British Columbia. p47a, b.
- Krajina, V.J. 1968. *Sarraceniaceae*, a new family for British Columbia. *Syesis* 1:121-124.
- Schnell, D.E. 1976. Carnivorous Plants of the United States and Canada. John F. Blair, Winston-Salem, North Carolina. 125 p.
- Straley, G.B., Taylor, R.L. & Douglas, G.W. 1985. The Rare Vascular Plants of British Columbia. National Museums of Canada. Syllogus no. 59.